**Final Project**

**Design Document**

CSU22012

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**Part 1: Finding shortest path between two stops (as input by the user), returning the list of stops en route as well as the associated ‘cost’.**

**Part 2: Searching for a bus stop by full name or by the first few characters in the name, using a ternary search tree, returning the full stop information for each stop matching the search criteria (which can be zero, one or more stops).**

**Part 3: Searching for all trips with a given arrival time, returning full details of all trips matching the criteria (zero, one or more), sorted by trip id.**

**Part 4: Provide front interface enabling selection between the above features or an option to exit the programme and enabling required user input.**